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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/608,218	06/30/2000	Raoul Stubbe	0104-0278P	9676

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EXAMINER

PATEL, TULSIDAS C

ART UNIT	PAPER NUMBER
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2839

DATE MAILED: 12/09/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/413,444

Applicant(s)

ALBERT ET AL

Examiner

Evelyn A. Lester

Art Unit

2873

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 September 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 102-166 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 102-166 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 15
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Priority

1. The Applicants' claim for domestic priority under 35 U.S.C. 120 has been accepted and made of record.

Information Disclosure Statement

2. The Examiner thanks the Applicants for completing the serial applications initially cited on the PTO-1449 filed on 2-16-00, and for providing copies of each, as appropriate.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 154 and 156 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Both claims 154 and 156 recite a group of materials "consisting of" certain materials for the binder or suspending fluid, respectively. However, these claims are dependent on claims which also recite a closed group of materials (i.e. "consisting of"), but which do not incorporate the materials of claims 154 and 156.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action.

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 102—105, 108-117, 119, 123-127, 132-134, 138-140, 144, 146, 148, 149, 151-157, 159, 160 and 162-165 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Evans et al (U.S. patent 3,612,758).

Evans et al discloses the claimed invention of an encapsulated electrophoretic element comprising an electrophoretic ink(i.e. 18), wherein the electrophoretic ink has a plurality of non-spherical capsules (i.e. area filled with the ink 18 as shown in Figs. 1 and 3A) dispersed in a binder(12), at least one of the capsules being enclosed by a

membrane(13), wherein the plurality if capsules form substantially a single layer when the ink is disposed on a substrate(i.e. Figs. 1 and 3A).

With respect to the other claims, please note at Figures 1-3C and their accompanying text; especially note at column 3, lines 1-9, 20-28, and 36-40, column 4, lines 29-35, 73-75, and column 7, lines 3-8.

6. Claims 102, 103, 105, 108, 109, 111-120, 123-127, 132-138, 140, 144-149, 152-160 and 162-166, as far as respective claims are understood, are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Jacobson et al (U.S. patent 5,930,026).

Jacobson et al discloses the claimed invention of an encapsulated electrophoretic element(133) having an electrophoretic ink, wherein the electrophoretic ink has a plurality of non-spherical capsules(133 at col. 4, lines 5-7) dispersed in a binder(150), at least one of the capsules being enclosed by a membrane(or "shells" at col.4, lines 36-37), wherein the plurality if capsules form substantially a single layer when the ink is disposed on a substrate(Figs. 1A-1B).

With respect to the other claims, please note Jacobson et al at Figures 1A-1B and their accompanying text; as well as at column 2, lines 27-34 and lines 51-56, column 3, line 34 to column 6, line 33; especially noting column 3, lines 34-46, column 4, lines 5-17 and lines 30-41, column 4, line 66 to column 5, line 44, column 5, line 57 to column 6, line 4.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 106, 107, 118, 122, 135, 136, 142 and 143 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evans et al (U.S. patent 3,612,758).

Evans et al discloses the claimed invention as described and shown above, except for specific operating values and materials.

With respect to claims 106, 107, 118, 136, 142 and 143, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the Optimum-operating values, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). In the instant case, note Evans et al at Figures 1 and 3A.

With respect to claim 135, it would have been obvious to one having ordinary skill in the art at the time the invention was made to choose a specific material as claimed, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. In the instant case, Evans et al does teach

at column 2, lines 69-71 that the substrate material may be glass, polystyrene or any other suitable nonconductor. Polyester films are well known as Mylar, and would have been known to be a suitable nonconductor (note in Jacobson et al at col. 3, line 46, of rejection in paragraph above).

8. Claims 106, 107, 122, 141, 142, 143 and 150 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jacobson et al (5,930,026).

Jacobson et al discloses the claimed invention as described and shown above, except specific operating values and materials.

With respect to claims 106, 107, 142 and 143, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the Optimum-operating values, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). In the instant case, note Jacobson et al at Figures 1A and 1B, with their accompanying text.

With respect to claim 122, it would have been obvious to one having ordinary skill in the art at the time the invention was made to choose a specific material as claimed, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. In the instant case, note in Jacobson et al at column 5, line 65 to column 6, line 4, wherein the material for the "layer material" is

preferably a polymeric material, and the polymeric materials in claim 122 are well known.

With respect to claims 141 and 150, please note Jacobson et al teaches that the microcapsules need not be strictly spherical, but preferably have dimensions ranging from 5 to 500 microns, which would imply to one of ordinary skill in the art that the particles are of more than one shape.

9. Claims 128-131 rejected under 35 U.S.C. 103(a) as being unpatentable over Jacobson et al (U.S. patent 5,930,026) in view of Turner et al (U.S. patent 6,480,182 B2).

Jacobson et al discloses the claimed invention as described and shown above, except for the rear substrate having specific electronic elements incorporated therein. Turner et al teaches the use of nonlinear elements incorporated in the substrate to facilitate matrix addressing (note column 3, lines 37-49, for example, as well as Figure 1). Since Jacobson et al discloses the electrophoretic element to be part of matrix array display (column 2, lines 27-35), it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the nonlinear elements in the rear substrate to more efficiently address each matrix display element, as taught by Turner et al.

10. Claims 121 and 161 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jacobson et al (U.S. patent 5,930,026) in view of Jacobson et al (U.S. patent 6,323,989 B1).

With respect to claim 121, Jacobson et al ('026) discloses the claimed invention as described and shown above, except for the layer material comprising an additional material as chosen from the recited list of materials in claim 121. However, Jacobson et al ('989) does teach that the layer material incorporates a metallic-like particle, such as silver particles, as noted at column 21, lines 23-33. Therefore, one of ordinary skill in the art would have known to use the silver particles in the layer material of Jacobson et al's ('026) invention as taught by Jacobson et al ('989), since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

With respect to claim 161, Jacobson et al ('026) discloses the claimed invention as described and shown above, except for the specific at least one particle material comprising titania coated with a metal oxide. However, Jacobson et al ('989) does teach that the at least one particle material comprising titania coated with a metal oxide, as noted at column 20, lines 3-4. Therefore, one of ordinary skill in the art would have known to use the titania coated particle in Jacobson et al's ('026) invention as taught by Jacobson et al ('989), since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Response to Arguments

11. Applicant's arguments with respect to claims 1-3, 5-7, 9, 12-39, 92, 94 and 98-101 have been considered but are moot in view of the new ground(s) of rejection.

The new grounds of rejection were necessitated by the Applicants amendment, wherein all previous claims were cancelled and new claims (claims 102-166) of differing scope than previous claims were added.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

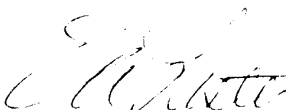
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13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Evelyn A. Lester whose telephone number is (703) 308-4943. The examiner can normally be reached on M- F, subject to I-flex schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Y. Epps can be reached on (703) 308-4883. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7724 for regular communications and (703)308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.


Evelyn A. Lester
Primary Examiner
Art Unit 2873

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December 5, 2002